Diazotization

$$Ar - NH_2 + HCI + HNO_2 \rightarrow Ar - N = N CI + H_2O$$

Azo coupling

$$Ar \stackrel{+}{\longrightarrow} N \quad Cl \stackrel{-}{\longrightarrow} + \stackrel{N}{\longrightarrow} NH_2$$

FIG. 1

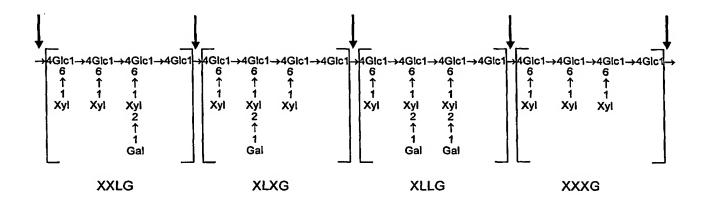


FIG. 2

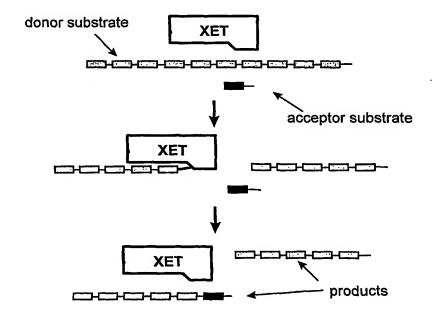


FIG. 3

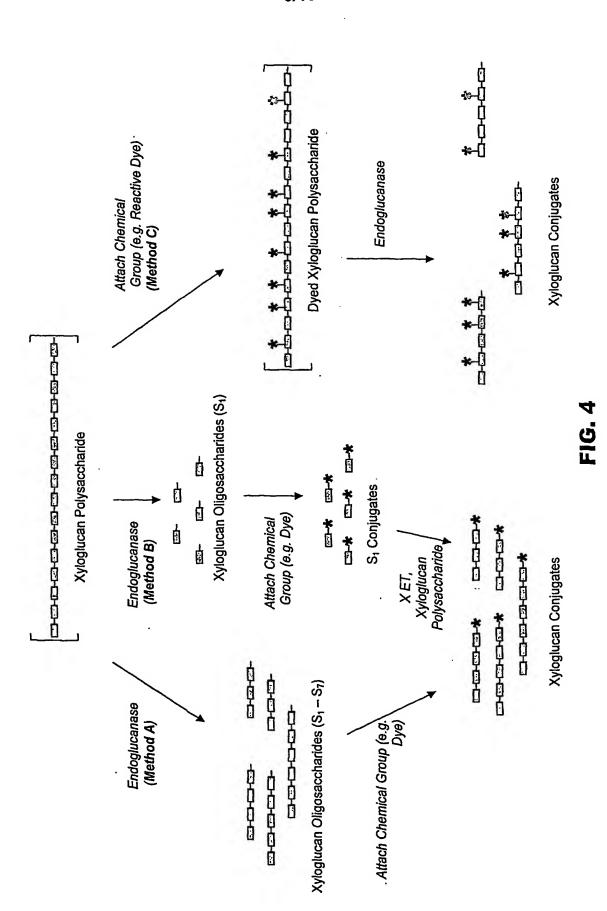


FIG. 5

FIG. 6

FIG. 7

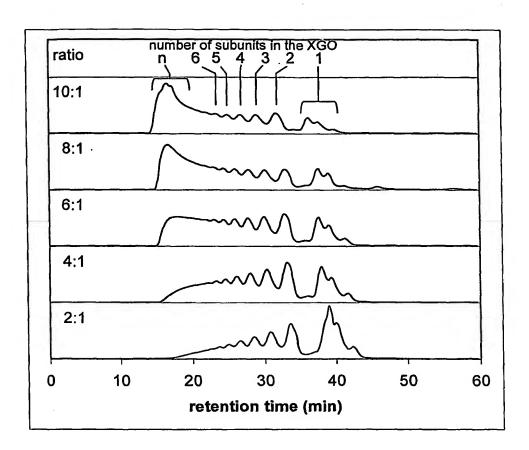


FIG. 8

7/15

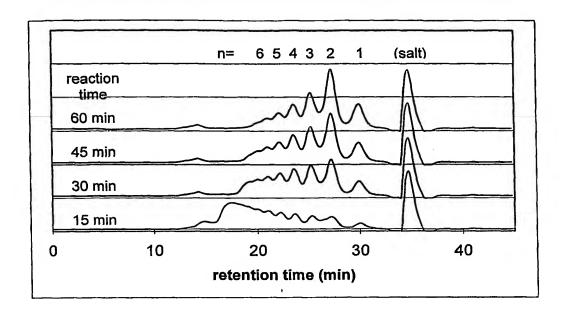


FIG. 9

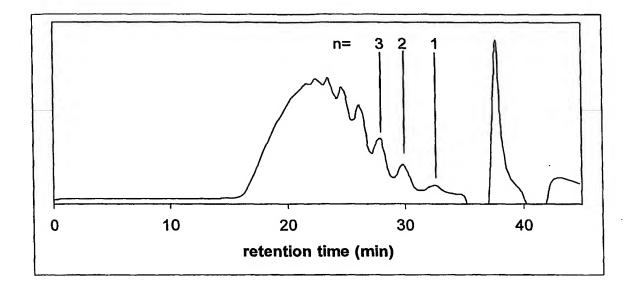


FIG. 10

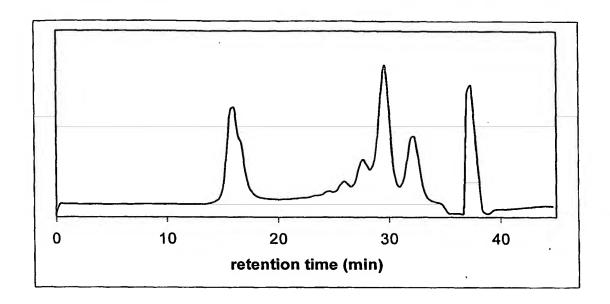


FIG. 11

FIG. 12

FIG. 13

FIG. 14

FIG. 15

14/15

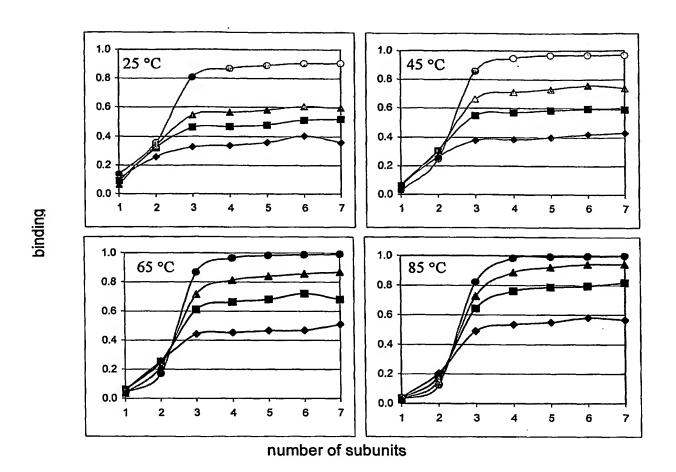


FIG. 16

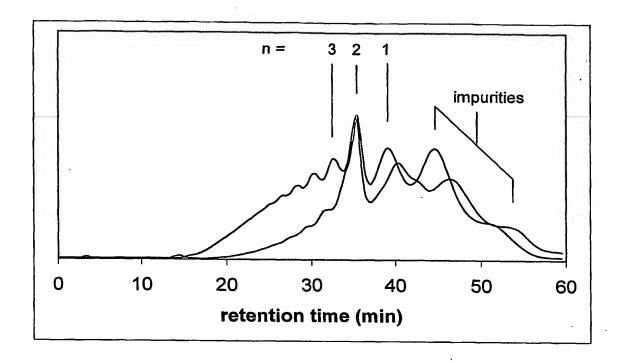


FIG. 17